

in basic and remedial literacy skills, assistance in job seeking skills, and training in starting or operating a business enterprise.

(b) Existing educational and training programs

Insofar as practicable, the Secretary shall use existing Federal, State, and private education resources in carrying out these programs.

(Pub. L. 101-624, title XXIII, § 2377, Nov. 28, 1990, 104 Stat. 4048; Pub. L. 106-113, div. B, § 1000(a)(3) [title III, § 345(e)], Nov. 29, 1999, 113 Stat. 1535, 1501A-204.)

AMENDMENTS

1999—Subsec. (a)(2), (3). Pub. L. 106-113, which directed substitution of “National Forest System land resources” for “national forest resources” in pars. (3) and (4), was executed by making the substitution in pars. (2) and (3) to reflect the probable intent of Congress.

§ 6616. Loans to economically disadvantaged rural communities

(a) In general

The Secretary, under such terms and conditions as the Secretary shall establish, may make loans to economically disadvantaged rural communities for the purposes of securing technical assistance and services to aid in the development and implementation of action plans, including planning for—

- (1) improving existing facilities in the community that may generate employment or revenue;
- (2) expanding existing infrastructure, facilities, and services to capitalize on opportunities to diversify economies now dependent on National Forest System land resources; and
- (3) supporting the development of new industries or commercial ventures unrelated to National Forest System land resources.

(b) Interest rates

The interest rates on a loan made pursuant to this section shall be as determined by the Secretary, but not in excess of the current average market yield on outstanding marketable obligations of the United States with remaining periods to maturity comparable to the maturity of such loan, plus not to exceed 1 percent, as determined by the Secretary, and rounded to the nearest one-eighth of 1 percent.

(Pub. L. 101-624, title XXIII, § 2378, Nov. 28, 1990, 104 Stat. 4048; Pub. L. 106-113, div. B, § 1000(a)(3) [title III, § 345(f)], Nov. 29, 1999, 113 Stat. 1535, 1501A-204.)

AMENDMENTS

1999—Subsec. (a)(2), (3). Pub. L. 106-113 substituted “National Forest System land resources” for “national forest resources”.

§ 6617. Authorization of appropriations and spending authority

(a) Authorization of appropriations

Except as provided in subsection (b) of this section, there are authorized to be appropriated—

- (1) an amount not to exceed 5 percent of the sum of—

(A) the sums received by the Secretary from sales of timber and other products of the forests; and

(B) user fees paid in connection with the use of forest lands; and

(2) such additional sums as may be necessary to carry out the purposes of this subchapter.

(b) Limitation on authorization

Subsection (a) of this section shall not in any way affect payments to the States pursuant to section 500 of title 16.

(c) Spending authority

Any spending authority (as defined in section 651 of title 2) provided in this subchapter shall be effective for any fiscal year only to such extent or in such amounts as are provided in appropriation Acts.

(Pub. L. 101-624, title XXIII, § 2379, Nov. 28, 1990, 104 Stat. 4049.)

CHAPTER 96—GLOBAL CLIMATE CHANGE

Sec.

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§ 6701. Global Climate Change Program

(a) Establishment

For the purpose of having within the Department of Agriculture a focal point for coordinating all issues of climate change, the Secretary of Agriculture (hereafter in this chapter referred to as the “Secretary”) shall establish a Global Climate Change Program (hereafter in this section referred to as the “Program”). The Secretary shall designate a director of the Program who shall be responsible to the Secretary for carrying out the duties specified in subsections (b) and (c) of this section.

(b) General duties

The Director shall—

- (1) coordinate policy analysis, long range planning, research, and response strategies relating to climate change issues;

(2) provide liaison with other Federal agencies, through the Office of Science and Technology Policy, regarding issues of climate change;

(3) inform the Department of scientific developments and policy issues relating to the effects of climate change on agriculture and forestry, including broader issues that affect the impact of climate change on the farms and forests of the United States;

(4) recommend to the Secretary alternative courses of action with which to respond to such scientific developments and policy issues; and

(5) ensure that recognition of the potential for climate change is fully integrated into the research, planning, and decision-making processes of the Department.

(c) Specific responsibilities

The Director shall—

(1) coordinate the global climate change studies required by section 6702 of this title;

(2) provide, through such other agencies as the Secretary determines appropriate, competitive grants for research in climatology relating to the potential impact of climate change on agriculture;

(3) coordinate the participation of the Department in interagency climate-related activities;

(4) consult with the National Academy of Sciences and private, academic, State, and local groups with respect to climate research and related activities;

(5) represent the Department to the Office of Science and Technology Policy and coordinate the activities of the Department in response to requirements of this chapter;

(6) represent the Department on the Intergovernmental Panel on Climate Change; and

(7) review all Department budget items relating to climate change issues, including specifically the research budget to be submitted by the Secretary to the Office of Science and Technology Policy and the Office of Management and Budget.

(Pub. L. 101-624, title XXIV, § 2402, Nov. 28, 1990, 104 Stat. 4058.)

REFERENCES IN TEXT

This chapter, referred to in subsecs. (a) and (c)(5), was in the original “this title”, meaning title XXIV of Pub. L. 101-624, Nov. 28, 1990, 104 Stat. 4058, which is classified generally to this chapter. For complete classification of title XXIV to the Code, see Short Title note below and Tables.

SHORT TITLE

Section 2401 of title XXIV of Pub. L. 101-624 provided that: “This title [enacting this chapter and amending sections 1601 and 1602 of Title 16, Conservation] may be cited as the ‘Global Climate Change Prevention Act of 1990’.”

§ 6702. Study of global climate change, agriculture, and forestry

(a) Crops

(1) In general

The Secretary shall study the effects of global climate change on agriculture and for-

estry. The study shall, at a minimum address—

(A) the effects of simultaneous increases in temperature and carbon dioxide on crops of economic significance;

(B) the effects of more frequent or more severe weather events on such crops;

(C) the effects of potential changes in hydrologic regimes on current crop yields;

(D) the economic effects of widespread and increased drought frequency in the south, midwest, and plains States; and

(E) changes in pest problems due to higher temperatures.

(2) Further studies

If the results of the study conducted under paragraph (1) warrant, the Secretary shall conduct further studies that address the means of mitigating the effects of global climate change on crops of economic significance that shall, at a minimum—

(A) identify whether climate change tolerance can be bred into these crops, the amount of time necessary for any such breeding, and the effects on the income of farmers;

(B) evaluate existing genetic resource and breeding programs for crops for their ability to develop new varieties that can tolerate potential climate changes; and

(C) assess the potential for the development of crop varieties that are tolerant to climate changes and other environmental stresses, such as drought, pests, and salinity.

(b) Forests

The Secretary shall conduct a study on the emissions of methane, nitrous oxide, and hydrocarbons from tropical and temperate forests, the manner in which such emissions may affect global climate change; the manner in which global climate change may affect such emissions; and the manner in which such emissions may be reduced through management practices. The study shall, at a minimum—

(1) obtain measurements of nitrous oxide, methane, and nonmethane hydrocarbons from tropical and temperate forests;

(2) determine the manner in which the nitrous oxide, methane, and nonmethane hydrocarbon emissions from temperate and tropical forest systems will respond due to climate change; and

(3) identify and address alternative management strategies for temperate and tropical forests that may mitigate any negative effects of global climate change.

(c) Reports

The Secretary shall submit reports of the studies conducted under subsections (a) and (b) of this section within 3 and 6 years, respectively, after November 28, 1990, to the Committee on Agriculture and the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Agriculture, Nutrition, and Forestry of the Senate. In addition, interim reports regarding such studies shall be provided by the Secretary to such Committees annually, with recommendations for actions which may be taken to mitigate the nega-

tive effects of global climate change and to adapt to global climate changes and related phenomena.

(Pub. L. 101-624, title XXIV, § 2403, Nov. 28, 1990, 104 Stat. 4059.)

CHANGE OF NAME

Committee on Science, Space, and Technology of House of Representatives treated as referring to Committee on Science of House of Representatives by section 1(a) of Pub. L. 104-14, set out as a note preceding section 21 of Title 2, The Congress.

§ 6703. Repealed. Pub. L. 104-127, title VIII, § 868, Apr. 4, 1996, 110 Stat. 1175

Section, Pub. L. 101-624, title XXIV, § 2404, Nov. 28, 1990, 104 Stat. 4060, required Secretary of Agriculture to establish technical advisory committee to provide advice to Secretary concerning major study areas required under this chapter.

§ 6704. Office of International Forestry

(a) Establishment

The Secretary, acting through the Chief of the Forest Service, shall establish an Office of International Forestry within the Forest Service within six months after November 28, 1990.

(b) Deputy Chief designation

The Chief shall appoint a Deputy Chief for International Forestry.

(c) Duties

The Deputy Chief shall—

- (1) be responsible for the international forestry activities of the Forest Service;
- (2) coordinate the activities of the Forest Service in implementing the provisions of this chapter; and
- (3) serve as Forest Service liaison to the director for the program established pursuant to section 6701 of this title.

(d) Authorization of appropriations

There are authorized to be appropriated for each of fiscal years 1996 through 2007 such sums as are necessary to carry out this section.

(Pub. L. 101-624, title XXIV, § 2405, Nov. 28, 1990, 104 Stat. 4060; Pub. L. 104-127, title III, § 371, Apr. 4, 1996, 110 Stat. 1015; Pub. L. 107-171, title VIII, § 8102, May 13, 2002, 116 Stat. 475.)

AMENDMENTS

2002—Subsec. (d). Pub. L. 107-171 substituted “2007” for “2002”.

1996—Subsec. (d). Pub. L. 104-127 added subsec. (d).

§ 6705. Line item

The President’s proposed budget to Congress for the first fiscal year beginning after November 28, 1990, and for each subsequent fiscal year shall specifically identify funds to be spent on Forest Service international cooperation and assistance.

(Pub. L. 101-624, title XXIV, § 2406, Nov. 28, 1990, 104 Stat. 4060.)

§ 6706. Institutes of Tropical Forestry

The Secretary is authorized and directed to establish an Institute of Tropical Forestry in

Puerto Rico and an Institute of Pacific Islands Forestry (hereafter in this section referred to as the “Institutes”). The Institutes shall conduct research on forest management and natural resources that shall include—

- (1) management and development of tropical forests;
- (2) the relationship between climate change and tropical forests;
- (3) threatened and endangered species;
- (4) recreation and tourism;
- (5) development of tropical forest resources on a sustained yield basis;
- (6) techniques to monitor the health and productivity of tropical forests;
- (7) tropical forest regeneration and restoration; and
- (8) the effects of tropical deforestation on biodiversity, global climate, wildlife, soils, and water.

(Pub. L. 101-624, title XXIV, § 2407, Nov. 28, 1990, 104 Stat. 4060.)

§ 6707. Urban forestry demonstration projects

The Secretary is authorized to undertake, through the Forest Service’s Northeastern Area State and Private Forestry program, a study and pilot implementation project to demonstrate the benefits of retaining and integrating forests in urban development. The focus of such a study and implementation project should be to protect the environment and associated natural resource values, for current and future generations.

(Pub. L. 101-624, title XXIV, § 2409, Nov. 28, 1990, 104 Stat. 4061.)

§ 6708. Biomass energy demonstration projects

The Secretary, in consultation with the Secretary of Energy, may carry out projects that demonstrate the potential of short-rotation silvicultural methods to produce wood for electricity production and industrial energy needs. In carrying out such projects, the Secretary shall cooperate with private industries, Federal and State agencies, and other organizations.

(Pub. L. 101-624, title XXIV, § 2410, Nov. 28, 1990, 104 Stat. 4061.)

§ 6709. Interagency cooperation to maximize biomass growth

The Secretary may enter into an agreement with the Secretary of Defense to—

- (1) conduct a study of reforestation and improved management of Department of Defense military installations and lands; and
- (2) develop a program to manage such forests and lands so as to maximize their potential for biomass growth and sequestering carbon dioxide.

(Pub. L. 101-624, title XXIV, § 2411, Nov. 28, 1990, 104 Stat. 4062.)

§ 6710. Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary for each of the fiscal years 1991 through 1997, to carry out this chapter.

(Pub. L. 101-624, title XXIV, §2412, Nov. 28, 1990, 104 Stat. 4062; Pub. L. 104-127, title VIII, §843, Apr. 4, 1996, 110 Stat. 1170.)

AMENDMENTS

1996—Pub. L. 104-127 substituted “1997” for “1996”.

§ 6711. Carbon cycle research

(a) In general

To the extent funds are made available for this purpose, the Secretary shall provide a grant to the Consortium for Agricultural Soils Mitigation of Greenhouse Gases, acting through Kansas State University, to develop, analyze, and implement, through the land grant universities described in subsection (b) of this section, carbon cycle research at the national, regional, and local levels.

(b) Land grant universities

The land grant universities referred to in subsection (a) of this section are the following:

- (1) Colorado State University.
- (2) Iowa State University.
- (3) Kansas State University.
- (4) Michigan State University.
- (5) Montana State University.
- (6) Purdue University.
- (7) Ohio State University.
- (8) Texas A&M University.
- (9) University of Nebraska.

(c) Use

Land grant universities described in subsection (b) of this section shall use funds made available under this section—

- (1) to conduct research to improve the scientific basis of using land management practices to increase soil carbon sequestration, including research on the use of new technologies to increase carbon cycle effectiveness, such as biotechnology and nanotechnology;
- (2) to enter into partnerships to identify, develop, and evaluate agricultural best practices, including partnerships between—
 - (A) Federal, State, or private entities; and
 - (B) the Department of Agriculture;
- (3) to develop necessary computer models to predict and assess the carbon cycle;
- (4) to estimate and develop mechanisms to measure carbon levels made available as a result of—
 - (A) voluntary Federal conservation programs;
 - (B) private and Federal forests; and
 - (C) other land uses;
- (5) to develop outreach programs, in coordination with Extension Services, to share information on carbon cycle and agricultural best practices that is useful to agricultural producers; and
- (6) to collaborate with the Great Plains Regional Earth Science Application Center to develop a space-based carbon cycle remote sensing technology program to—
 - (A) provide, on a near-continual basis, a real-time and comprehensive review of vegetation conditions;
 - (B) assess and model agricultural carbon sequestration; and

(C) develop commercial products.

(d) Cooperative research

(1) In general

Subject to the availability of appropriations, the Secretary, in cooperation with departments and agencies participating in the U.S. Global Change Research Program (which may use any of their statutory authorities) and with eligible entities, may carry out research to promote understanding of—

- (A) the flux of carbon in soils and plants (including trees); and
- (B) the exchange of other greenhouse gases from agriculture.

(2) Eligible entities

Research under this subsection may be carried out through the competitive awarding of grants and cooperative agreements to colleges and universities (as defined in section 3103 of this title).

(3) Cooperative research purposes

Research conducted under this subsection shall encourage collaboration among scientists with expertise in the areas of soil science, agronomy, agricultural economics, forestry, and other agricultural sciences to focus on—

- (A) developing data addressing carbon losses and gains in soils and plants (including trees) and the exchange of methane and nitrous oxide from agriculture;
- (B) understanding how agricultural and forestry practices affect the sequestration of carbon in soils and plants (including trees) and the exchange of other greenhouse gases, including the effects of new technologies such as biotechnology and nanotechnology;
- (C) developing cost-effective means of measuring and monitoring changes in carbon pools in soils and plants (including trees), including computer models;
- (D) evaluating the linkage between federal conservation programs and carbon sequestration;
- (E) developing methods, including remote sensing, to measure the exchange of carbon and other greenhouse gases sequestered, and to evaluate leakage, performance, and permanence issues; and
- (F) assessing the applicability of the results of research conducted under this subsection for developing methods to account for the impact of agricultural activities (including forestry) on the exchange of greenhouse gases.

(4) Authorization of appropriation

There are authorized to be appropriated such sums as are necessary to carry out this subsection for each of fiscal years 2002 through 2007.

(e) Extension projects

(1) In general

The Secretary, in cooperation with departments and agencies participating in the U.S. Global Change Research Program (which may use any of their statutory authorities), and local extension agents, experts from institu-